*m*CD20 VersaClone cDNA

Catalog Number: RDC0228

Specifications:

Gene:	*m*MS4A1
Accession:	NP_031667
Insert size:	888bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

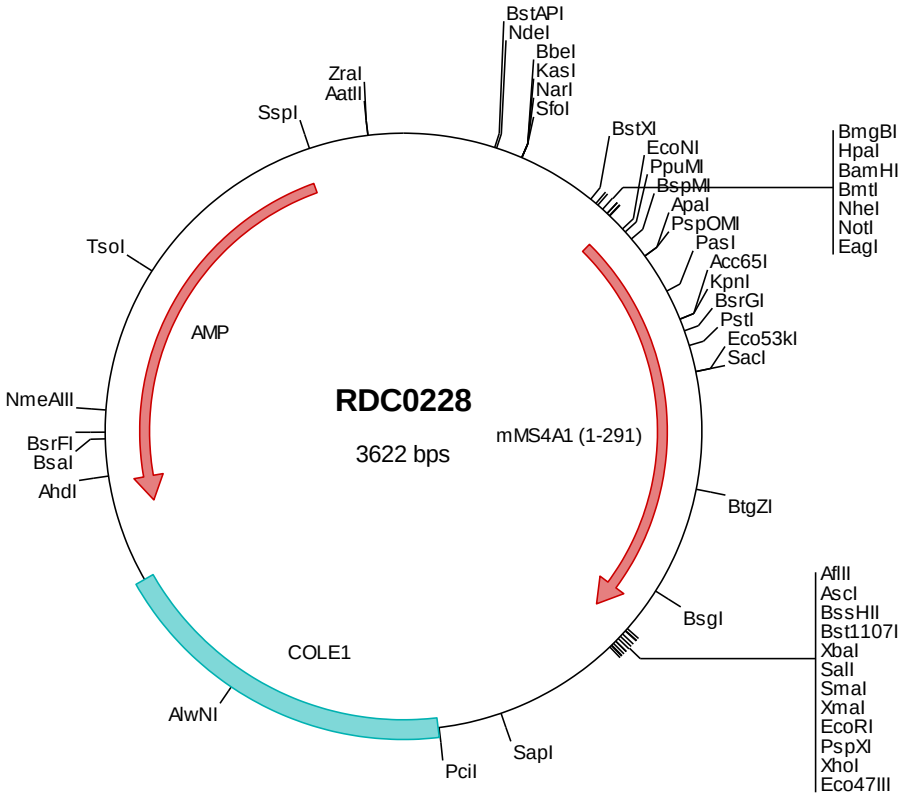
*m*CD20 cDNA Plasmid

Ms4a1 membrane-spanning 4-domains, subfamily A, member 1 [*Mus musculus*]

Also known as: Cd20; Ly-44; Ms4a2; AA960661

Summary:

MS4A1 is a member of the membrane-spanning 4A gene family. Members of this nascent protein family are characterized by common structural features and similar intron/exon splice boundaries and display unique expression patterns among hematopoietic cells and nonlymphoid tissues. MS4A1 is expressed on pre-B, naïve and mature B-lymphocytes and B-cell lymphomas. It is a B-lymphocyte surface molecule which plays a role in the development and differentiation of B-cells into plasma cells. Defects in MS4A1 are the cause of immunodeficiency common variable type 5 (CVID5) also called antibody deficiency due to CD20 defect. CVID5 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC0228 Plasmid DNA Sequence

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 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atgagtggac ctttcccagc agagcctaca aaaggtcccc tcgccatgca
 501  acctgctcca aaagtgaacc tcaaaaggac atcttcactg gtgggcccca cacaaagctt cttcatgagg gaatcaaagg ctttgggggc tgtccaaatc
 601  atgaatggcc tcttccatat taccctgggg ggactgctga tgatccccac aggggtcttc gcacccatct gtttgagtgt atggtaccct ctctggggag
 701  gcattatgta cattatttca ggatcactcc tggcagctgc agcagaaaaa acctccagga agagtttggt caaagcaaaa gtgataatga gctctctaag
 801  cctctttgct gccatttctg gaataattct ttcaatcatg gacatactta acatgacact ttctcatttt ttaaaaatga gaagactgga gcttattcaa
 901  acttccaagc cgtatgttga tatctacgac tgtgaaccat ctaattcctc agagaaaaac tccccatcta cacagtactg taacagcatt cagtctgtgt
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1101  caaatctaat gtggttctgc tgtcagctgg agaaaaaaat gagcagacga ttaaaatgaa agaagaaatc attgagctaa gtggagtatc ttcccaacca
1201  aagaatgaag aggaaattga aattattcca gtgcaggagg aagaagaaga agaagcagaa ataaattttc cagcacctcc ccaagagcag gaatccttgc
1301  cagtggaaaa tgagatcgct ccttaaggcg cgccagtata ctctagagtc gacacccggg gaattcctcg agcgctcgtc tctagcttgg cgtaatcatg
1401  gtcatagctg tttcctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc cggaagcata aagtgtaaag cctggggtgc ctaatgagtg
1501  agctaactca cattaattgc gttgcgctca ctgcccgctt tccagtcggg aaacctgtcg tgccagctgc attaatgaat cggccaacgc gcggggagag
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1701  aatacggtta tccacagaat caggggataa cgcaggaaag aacatgtgag caaaaggcca gcaaaaggcc aggaaccgta aaaaggccgc gttgctggcg
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2101  aactatcgtc ttgagtccaa cccggtaaga cacgacttat cgccactggc agcagccact ggtaacagga ttagcagagc gaggtatgta ggcggtgcta
2201  cagagttctt gaagtggtgg cctaactacg gctacactag aaggacagta tttggtatct gcgctctgct gaagccagtt accttcggaa aaagagttgg
2301  tagctcttga tccggcaaac aaaccaccgc tggtagcggt ggttttttg tttgcaagca gcagattacg cgcagaaaaa aaggatctca agaagatcct
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2501  taaattaaaa atgaagtttt aaatcaatct aaagtatata tgagtaaact tggtctgaca gttaccaatg cttaatcagt gaggcaccta tctcagcgat
2601  ctgtctattt cgttcatcca tagttgcctg actccccgtc gtgtagataa ctacgatacg ggagggctta ccatctggcc ccagtgctgc aatgataccg
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2801  agtctattaa ttgttgccgg gaagctagag taagtagttc gccagttaat agtttgcgca acgttgttgc cattgctaca ggcatcgtgg tgtcacgctc
2901  gtcgtttggt atggcttcat tcagctccgg ttcccaacga tcaaggcgag ttacatgatc ccccatgttg tgcaaaaaag cggttagctc cttcggtcct
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3101  ctgtgactgg tgagtactca accaagtcat tctgagaata gtgtatgcgg cgaccgagtt gctcttgccc ggcgtcaata cgggataata ccgcgccaca
3201  tagcagaact ttaaaagtgc tcatcattgg aaaacgttct cggggcgaa aactctcaag gatcttaccg ctgttgagat ccagttcgat gtaacccact
3301  cgtgcaccca actgatcttc agcatctttt actttcacca gcgtttctgg gtgagcaaaa acaggaaggc aaaatgccgc aaaaaaggga ataagggcga
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3501  gaaaaataaa caaatagggg ttccgcgcac atttccccga aaagtgccac ctgacgtcta agaaaccatt attatcatga cattaaccta taaaaatagg
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> RDC0228 Translated Insert Sequence

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 101  tsrkslvkak vimsslslfa aisgiilsim dilnmtlshf lkmrrleliq tskpyvdiyd cepsnssekn spstqycnsi qsvflgilsa mlisaffqkl
 201  vtagivenew krmctrsksn vvllsagekn eqtikmkeei ielsgvssqp kneeeieiip vqeeeeeeae infpappqeq eslpveneia p
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